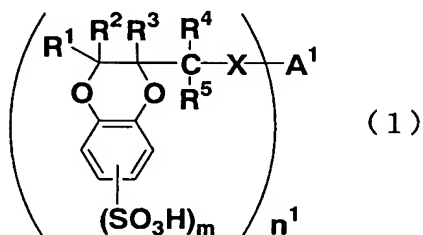
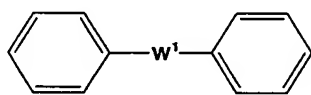


CLAIMS:

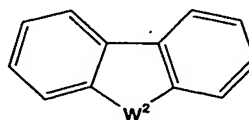
1. A 1,4-benzodioxanesulfonic acid compound represented by formula (1), a 1,4-benzodioxanesulfonic acid compound represented by formula (2), a 1,4-benzodioxanesulfonic acid compound having the repeating unit represented by formula (3), or a 1,4-benzodioxanesulfonic acid compound having the repeating unit represented by formula (4)



- [where R<sup>1</sup> to R<sup>5</sup> each independently denotes a hydrogen atom, an unsubstituted or substituted monovalent hydrocarbon group, or a halogen atom; X denotes a single bond, O, S, or NH; A<sup>1</sup> denotes a hydrogen atom, a halogen atom (if X denotes a single bond), S (if X denotes a single bond), S(O) group, S(O<sub>2</sub>) group, any of N, Si, P, and P(O) group having an unsubstituted or substituted group binding thereto, an unsubstituted or substituted hydrocarbon group, 1,3,5-triazine group, or a substituted or unsubstituted group represented by formula (5) or (6)]

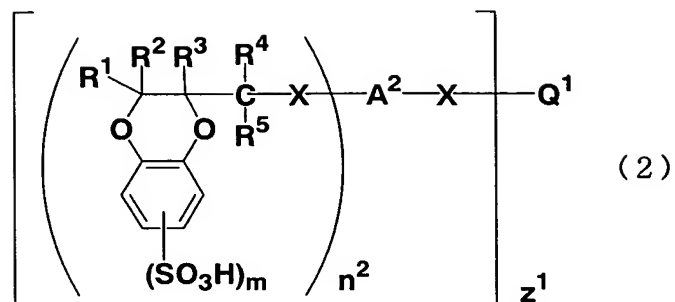


(5)

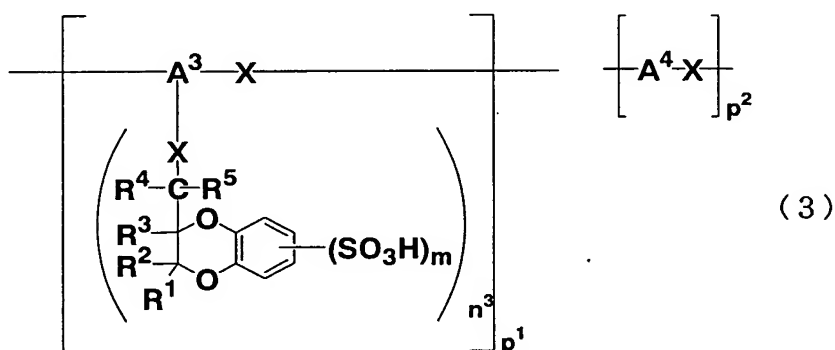


(6)

- (where W<sup>1</sup> and W<sup>2</sup> each independently denotes O, S, S(O) group, S(O<sub>2</sub>) group, or any of N, Si, P, and P(O) group having an unsubstituted or substituted group binding thereto); n<sup>1</sup> is an integer which equals the valence of A<sup>1</sup> and satisfies 1 ≤ n<sup>1</sup>; and m denotes the number of sulfonic acid groups binding to the benzene ring of the 1, 4-benzodioxane skeleton, with 1 ≤ m ≤ 4.]

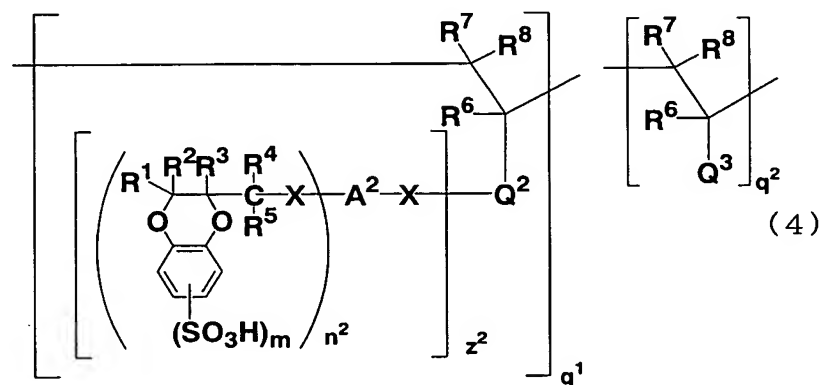


(where R<sup>1</sup> to R<sup>5</sup>, X, and m are defined as above; A<sup>2</sup> denotes an unsubstituted or substituted divalent or higher multivalent hydrocarbon group, a divalent or trivalent 1,3,5-triazine group, or a substituted or unsubstituted group represented by the formula (5) or (6) above; Q<sup>1</sup> denotes a hydrogen atom, a halogen atom (if X denotes a single bond), S (if X denotes a single bond), S(O) group, S(O<sub>2</sub>) group, any of N, Si, P, and P(O) group having an unsubstituted or substituted group binding thereto, an unsubstituted or substituted hydrocarbon group, 1,3,5-triazine group, or a substituted or unsubstituted group represented by the formula (5) or (6) above; n<sup>2</sup> is an integer which equals the number of valence of A<sup>2</sup> minus 1 and satisfies 1 ≤ n<sup>2</sup>; and z<sup>1</sup> is an integer which equals the number of valence of Q<sup>1</sup> and satisfies 1 ≤ z<sup>1</sup>.)



(where R<sup>1</sup> to R<sup>5</sup>, X, and m are defined as above; A<sup>3</sup> denotes an unsubstituted or substituted trivalent or higher multivalent hydrocarbon group, a trivalent 1,3,5-triazine group, or a substituted or unsubstituted group represented by the formula (5) or (6) above; A<sup>4</sup> denotes an unsubstituted or substituted divalent or higher multivalent hydrocarbon group, a divalent

or trivalent 1,3,5-triazine group, or a substituted or unsubstituted group represented by the formula (5) or (6) above;  $n^3$  is an integer which equals the number of valence of  $A^3$  minus 2 and satisfies  $1 \leq n^3$ ; and  $p^1$  is an integer which satisfies  $1 \leq p^1$  and  $p^2$  is an integer which satisfies  $0 \leq p^2$ , with  $1 \leq p^1 + p^2 \leq 10000$ .)



(where  $R^1$  to  $R^5$ ,  $A^2$ ,  $X$ ,  $m$ , and  $n^2$  are defined as above;  $R^6$  to  $R^8$  each independently denotes a hydrogen atom, an unsubstituted or substituted monovalent hydrocarbon group, or a halogen atom;  $Q^2$  denotes an unsubstituted or substituted divalent or higher multivalent hydrocarbon group, a divalent or trivalent 1,3,5-triazine group, or a substituted or unsubstituted group represented by the formula (5) or (6) above;  $Q^3$  denotes an unsubstituted or substituted hydrocarbon group, a 1,3,5-triazine group, or a substituted or unsubstituted group represented by the formula (5) or (6) above;  $z^2$  is an integer which equals the number of valence of  $Q^2$  minus 1 and satisfies  $1 \leq z^2$ ; and  $q^1$  is an integer which satisfies  $1 \leq q^1$  and  $q^2$  is an integer which satisfies  $0 \leq q^2$ , with  $1 \leq q^1 + q^2 \leq 10000$ .)

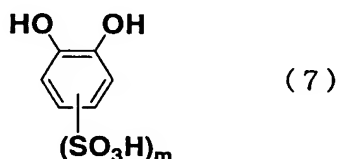
2. An electron acceptor substance composed of the 1,4-benzodioxanesulfonic acid compound as defined in claim 1.

3. A charge transporting varnish comprising the 1,4-benzodioxanesulfonic acid compound as defined in claim 1, a charge transporting substance, and a solvent.

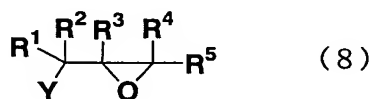
5 4. A charge transporting thin film comprising the 1,4-benzodioxanesulfonic acid compound as defined in claim 1 and a charge transporting substance.

10 5. An organic electroluminescence device having the charge transporting thin film as defined in claim 4.

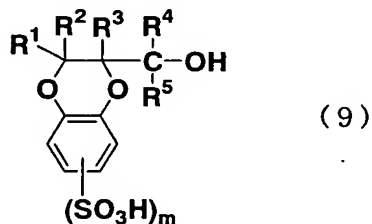
6. A process which comprises reacting (o-dihydroxybenzene)sulfonic acid represented by formula (7)



15 (where m denotes the number of sulfonic acid groups binding to the dihydroxybenzene ring, with  $1 \leq m \leq 4$ .)  
with an epihalohydrin compound represented by formula (8)



20 (where  $R^1$  to  $R^5$  each independently denotes a hydrogen atom, an unsubstituted or substituted monovalent hydrocarbon group, or a halogen atom; and Y denotes a halogen atom.)  
in the presence of a catalyst, thereby producing a 1,4-benzodioxanesulfonic acid compound represented by formula (9).



25 (where  $R^1$  to  $R^5$  and m are defined as above.)